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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,341	12/31/2003	Manish Seth	60732-300101	8224
	7590 05/28/200 ice of Larry Guernsey	8	EXAMINER	
P.O. Box 72024	17		SANDERS, KRIELLION ANTIONETTE	
San Jose, CA 95172-0247			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/749,341	SETH, MANISH				
Office Action Summary	Examiner	Art Unit				
	Kriellion A. Sanders	1796				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
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closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>17,19 and 21-43</u> is/are pending in the	application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>17, 19, 21-43</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers	·					
· · · <u> </u>						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ acce						
Applicant may not request that any objection to the o			-D 4 404(-I)			
Replacement drawing sheet(s) including the correction						
11)☐ The oath or declaration is objected to by the Exa	aminer, Note the attached Office	Action or form P1	O-152.			
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priori application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National	Stage			
Attachment(s)	<b></b> □	<b>477</b> 0 <b>440</b> )				
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P					
Paper No(s)/Mail Date	6)					

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 17, 19 and 21-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandon et al, US Patent No. 6114007 in view of Troutman et al, US Patent Publication 2004/0002559.

Applicant has amended the process claims to require that the extruder processor stabilizer/lubricant is a metallic stearate. It is noted that the filler material is present in an amount of 65-90% of the entire composition. Dependent claims indicate the filler material to be selected from a group consisting of limestone, dolomite, talc, silica and flyash.

1. Brandon et al discloses fire resistant, composite molding compositions containing an effective amount of a flame retardant additive. Reinforced products made according to the invention, such as composite roofing or construction materials, are rendered fire resistant in that the flame retardant additive, when exposed to temperatures high enough to cause combustion of the composite, decomposes and release gases which act as flame suppressants. Also disclosed is a method of making suitably fire resistant composites, and articles formed therefrom. This method includes blending a resin, reinforcing fiber and filler in a mixer, adding a liquid resin

which would function as a lubricant, and extruding the mixture through a die. See col. 3, line 19 through col. 5, line 47.

The inorganic filler, when used, may be used at any desired amount, for example, at a concentration of from about 20% by weight to about 90% by weight of the composition.

Preferably, the amount of filler is from about 40% by weight to about 80% by weight. The PVC powder can be present in an amount of from about 1 to about 75% of the filler.

Fillers that are useful for the patented resin system include slate flour, calcium carbonate, silicates, ground rock and clays. Where the composite is used to make roofing materials, slate flour is preferably used as the filler because it contributes to development of a desirable color in the molded product.

Various additional additives employed in the invention include additional fillers, catalysts, colorants, mold release agents and inhibitors. The formulations of the patented invention find utility in the manufacture of composites for uses in industries including but not limited to roofing, exterior floor and wall tiles, exterior siding, construction or automotive. A preferred use of the composite formulations is in the manufacture of construction materials such as roofing shingles or shakes.

The latter articles may take the form of the traditional "double coverage" layered tiles in which a significant portion of the shingle tile is covered or overlapped by the exposed portion of a superimposed tile. The composite formulations of the invention are however also sufficiently lightweight and durable to permit the manufacture of "single coverage" tiles in which only a small area of overlap is required between tiles.

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Troutman et al provides flame retardant coating compositions and articles coated therewith, which compositions comprise (A) a coating and (B) an effective flame retarding amount of a mixture of (i) at least one compound selected from the group consisting of the (a) sterically hindered nitroxyl stabilizers, (b) sterically hindered hydroxylamine stabilizers and (c) sterically hindered alkoxyamine stabilizers and (ii) at least one conventional flame retardant selected from the group consisting of (d) organohalogen flame retardants, (e) organophosphorus flame retardants, (f) isocyanurate flame retardants and (g) melamine based flame retardants. The coated articles are for example iron, steel, stainless steel, aluminum and other non-ferrous metals, wood, plywood, paper, cardboard, chip board, particle board, plastics, thermoplastics, epoxies, neoprene, rubber

Patentee includes fillers such as <u>talc</u>, calcium carbonate, magnesium carbonate, zinc borate, silicates, <u>silicones</u>, glass fibres, glass bulbs, asbestos, kaolin, mica, barium sulfate, calcium sulfate, metal oxides, hydrates and hydroxides such as zinc oxide, magnesium hydroxide, alumina trihydrate, <u>silica</u>, calcium silicate, magnesium silicate. Suitable substrates for the patented coatings include iron, steel, stainless steel, aluminum and other nonferrous metals, wood, plywood, paper, cardboard, chip board, particle board, plastics, PVC (polyvinyl chloride), <u>thermoplastics</u>, thermoplastic polyolefin, epoxies, neoprene, rubber and composites.

The patented coatings may be applied to exterior siding, interior structures, <u>roofing.</u>
garages, ceilings, penetration barriers, and PVC wrappings. The coatings may be employed in private homes, hotels and offices, for example as applied to wallpaper, paneling, drywall, wallboard, wainscoting, trusses, flooring and subflooring, studs, architectural millwork and trim,

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tiles, exterior decks, ceiling tiles, kitchen cabinets, kitchen hoods, carpet backing, interior walls, doors, file cabinets, office furniture, safes and barriers. The patented coatings may also be applied to structural substrates. Suitable wood substrates suggested in the reference include dimensional lumber, plywood, particle board, OOSB board, unfinished interior wood, plywood acoustical board, insulation board, cellulose board, fiberboard, excelsior (wood wool), wood shavings, cedar shakes, unsheathed shingles, shakes, siding, telephone poles, posts, paper, paperboard, cardboard and corrugated sheets.

The patented compositions may contain additional components such as pigments, dyes, plasticizers, antioxidants, thixotropic agents, levelling assistants, basic costabilizers, further light stabilizers like UV absorbers and/or sterically hindered amines, metal passivators, metal oxides, organophosphorus compounds, hydroxylamines, and mixtures thereof, especially pigments, phenolic antioxidants, calcium <u>stearate</u>, zinc <u>stearate</u>, UV absorbers of the 2-(2'-hydroxyphenyl)benzotri- azole and 2-(2-Hydroxyphenyl)-1,3,5-triazine classes, and sterically hindered amines. The compositions may also comprise <u>silica</u>. See page 1, paragraph [0018] through page 3, paragraph [0065] and page 19, paragraph 0323 through page 20, paragraph [0337].

Because Troutman et al documents that various additives are conventional in compositions used to form components for building materials such as roofing, the inclusion of the metal stearates, talc, silica and metal oxides of Troutman et al in the molding compositions of Brandon et al would have been obvious to one of ordinary skill in the art at the time of applicant's invention.

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The selection of a virgin polymer or recycled polymer is usually determined by cost considerations and there is nothing unobvious in such a limitation. Brandon discloses such a wide variety of building components that may be formulated by the patented method that panels and embossed components would be considered obvious to the ordinary practitioner of this art, since they are considered primarily for their aesthetic values.

## Response to Arguments

- 3. Applicant's arguments filed 1/10/2008 have been fully considered but they are not persuasive.
- 4. Applicant states that the Hemmings reference makes no reference to an extruder processing stabilizer/lubricant. Applicant is advised that he has identified this component as being a metallic stearate and as stated previously, the secondary reference to Troutman et al suggests that stearates are conventionally added to compositions used to form components for building materials such as roofing as is tale, silica and metal oxides.
- 5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
- 6. Applicants Declaration of commercial success does not persuade of the unobviousness of the presently claimed invention. An invention may be profitable even though not patentable.

## Conclusion

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kriellion A. Sanders/

Primary Examiner, Art Unit 1796

Kriellion A. Sanders Primary Examiner Art Unit 1796

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